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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,011	03/31/2004	Guenter Radestock	34874-093 UTIL	9556

64280 7590 10/10/2006

MINTZ, LEVIN, COHN, FERRIS, GLOVSKY & POPEO, P.C.  
9255 TOWNE CENTER DRIVE  
SUITE 600  
SAN DIEGO, CA 92121

EXAMINER

ADAMS, CHARLES D

ART UNIT	PAPER NUMBER
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2164

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/816,011

Applicant(s)

RADESTOCK ET AL.

Examiner

Charles D. Adams

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



**SAM RIMELL**  
**PRIMARY EXAMINER**

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 6-9, 13-14, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 6-9, 13-14, and 18 contain subject matter that is optionally recited. As such, the claims bear no patentable weight. See MPEP § 2106 Section II(C):

The subject matter of a properly construed claim is defined by the terms that limit its scope. It is this subject matter that must be examined. As a general matter, the grammar and intended meaning of terms used in a claim will dictate whether the language limits the claim scope. Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. The following are examples of language that may raise a question as to the limiting effect of the language in a claim:

- (A) statements of intended use or field of use,
- (B) "adapted to" or "adapted for" clauses,
- (C) "wherein" clauses, or
- (D) "whereby" clauses.

This list of examples is not intended to be exhaustive. >See also MPEP § 2111.04.<

The claims are optionally recited because they contain a limitation that only occurs if a certain condition is met. As such, the subject matter of the limitation may not actually occur.

As to claims 1, 9, and 14, the claims contain the limitation "otherwise executing the query on the data repository to generate a complete set of results". This limitation

may not occur, given the previous 'if' statement in the claim. Thus, this limitation bears no patentable weight.

As to claim 6, the claim contains the limitation "the query is to be executed on the subset of the data if the estimate of the number of results of the query is greater than a weighted subset estimate". The following subject matter may not occur, as this limitation is optionally recited.

As to claims 7, 13, and 18, the claims contain the limitation "otherwise executing the query on the data repository". This limitation may not occur, given the previous 'if' statement in the claim. Thus, this limitation bears no patentable weight.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim recites the limitation that " $F$  is an arbitrary number". However, this is unclear. There is no set of values or range for  $F$ . The formula is indefinite when  $F$  is an arbitrary number.

Claims 7, 13, and 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7, 13, and 18 recites the limitation "in response to executing the query on an (N-1)th subset of the data". However, there is no recitation of what "N" is. Therefore, the claim is indefinite.

Claim 8 is rejected under 35 U.S.C 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear that "est()" is returning a number of possible results for an operand or operator, as the claim language states that "est()" signifies an estimate of the operator or operand in the parenthesis".

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 7, and 9-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amiri et al. (US Patent 6,950,823) in view of Dettinger et al. (US Pre-Grant Publication 2004/0210579).

As to claim 1, Amiri et al. teaches:

Receiving a query for execution on data in the data repository (see column 6, lines 8-15);

Amiri et al. does not explicitly teach generating an estimate of a number of results of the query;

Dettinger et al. teaches generating an estimate of a number of results of the query (see paragraph [0095]. "In one embodiment, the performance criterion value is an estimated number of rows or records which is likely to be contained in the expected query result");

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Amiri et al. by the teaching of Dettinger et al., since Dettinger et al. teaches that "consequently, it may be desirable to limit the accessible data in the database to a subset of the data to narrow or focus research and analysis on the subset of the data for certain fields, so that subsequent queries may be issued against the database without the need for manually combining queries" (see paragraph [0010])".

Amiri et al. as modified teaches defining a subset of data in the data repository (see Amiri et al. 6:38-65);

Determining whether to execute the query on the subset of the data (see Amiri et al. 6:38-65);

If the query is to be executed on the subset of data, executing the query on the subset of the data to generate a partial set of results, otherwise executing the query on the data repository to generate a complete set of results (see Amiri et al. 6:38-65. Amiri

et al. teaches that local execution of the query always occurs if there is a chance that it will produce enough results).

Providing query results (see Amiri et al. 6:35-37).

As to claim 2, Amiri et al. as modified teaches wherein providing query results comprises making the query results available to an application program (see Amiri et al. 6:35-37 and Dettinger et al. paragraphs [0051] and [0056]; results are rendered in a browsing program).

As to claim 3, Amiri et al. teaches further comprising:

The application program providing query results to a user interface (see Amiri et al. 6:35-37 and Dettinger et al. paragraphs [0051] and [0056]; results are rendered in a browsing program).

As to claim 4, Amiri et al. as modified teaches wherein determining whether to execute the query on the subset of the data comprises determining whether a sufficient number of results will be generated by executing the query on the subset of the data (see Amiri et al. 6:38-65).

As to claim 5, Amiri et al. teaches wherein determining whether to execute the query on the subset of the data comprises estimating whether executing the query on

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the subset of the data would generate a desired number of results, the method further comprising:

Receiving a value representing the desired number of results (see Amiri et al. 6:38-65).

As to claim 7, Amiri et al. as modified teaches further comprising:

in response to executing the query on an (N-1)th subset of the data, determining whether a sufficient number of results have been generated (see Amiri et al. 6:59-65); and

If a sufficient number of results have been generated, defining an Nth subset of the data in the data repository and executing the query on the Nth subset of data (see Dettinger et al. paragraph [0105]. Any future queries, including the current one, can be executed on this Nth subset of data), otherwise executing the query on the data repository.

As to claim 9, Amiri et al. teaches an informational management system, the system comprising:

A data repository, wherein the data repository is configured to store data (see 4:15-24); and

One or more processes for executing queries on the data repository (see 6:8-15), wherein the one or more processes are operative to:

Receive a query for execution on data in the data repository (see 6:8-15);



Amiri et al. does not teach to generate an estimate of a number of results of the query;

Dettinger et al. teaches to generate an estimate of a number of results of the query (see paragraph [0095]. "In one embodiment, the performance criterion value is an estimated number of rows or records which is likely to be contained in the expected query result");

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Amiri et al. by the teaching of Dettinger et al., since Dettinger et al. teaches that "consequently, it may be desirable to limit the accessible data in the database to a subset of the data to narrow or focus research and analysis on the subset of the data for certain fields, so that subsequent queries may be issued against the database without the need for manually combining queries" (see paragraph [0010]).

Define a subset of data in the data repository (see Amiri et al. 6:38-65);

Determine whether to execute the query on the subset of the data (see Amiri et al. 6:38-65);

If the query is to be executed on the subset of the data, execute the query on the subset of the data to generate a partial set of results, otherwise execute the query on the data repository to generate a complete set of results (see Amiri et al. 6:38-65. Amiri et al. teaches that local execution of the query always occurs if there is a chance that it will produce enough results); and

Provide query results (see Amiri et al. 6:35-37).

As to claim 10, Amiri et al. as modified teaches wherein the operation of determining whether to execute the query on the subset of the data comprises determining whether a sufficient number of results will be generated by executing the query on the subset of data (see Amiri et al. 6:38-65).

As to claim 11, Amiri et al. as modified teaches wherein the operation of providing query results comprises making the query results available to an application program (see Amiri et al. 6:35-37 and Dettinger et al. paragraph [0056]).

As to claim 12, Amiri et al. as modified teaches wherein the operation of determining whether to execute the query on the subset of the data comprises estimating whether executing the query on the subset of the data would generate a desired number of results, the one or more processes are further operative to:

Receive a value representing the desired number of results (see Amiri et al. 6:38-65).

As to claim 13, Amiri et al. as modified teaches wherein the one or more processes are further operative to:

in response to executing the query on an (N-1)th subset of the data, determining whether a sufficient number of results have been generated (see 6:59-65); and

If a sufficient number of results have been generated, defining an Nth subset of the data in the data repository and executing the query on the Nth subset of data (see Dettinger et al. paragraph [0105]. Any future queries, including the current one, can be executed on this Nth subset of data), otherwise executing the query on the data repository.

As to claim 14, Amiri et al. teaches to:

Receive a query for execution on data in a data repository (see 6:8-15);

Amiri et al. does not teach to generate an estimate of a number of results of the query;

Dettinger et al. teaches to generate an estimate of a number of results of the query (see paragraph [0095]. "In one embodiment, the performance criterion value is an estimated number of rows or records which is likely to be contained in the expected query result");

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Amiri et al. by the teaching of Dettinger et al., since Dettinger et al. teaches that "consequently, it may be desirable to limit the accessible data in the database to a subset of the data to narrow or focus research and analysis on the subset of the data for certain fields, so that subsequent queries may be issued against the database without the need for manually combining queries" (see paragraph [0010])".

Amiri et al. as modified teaches:

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Define a subset of data in the data repository (see Amiri et al. 6:38-65);

Determine whether to execute the query on the subset of the data (see Amiri et al. 6:38-65);

If the query is to be executed on the subset of the data, execute the query on the subset of the data to generate a partial set of results, otherwise execute the query on the data repository to generate a complete set of results (see Amiri et al. 6:38-65 Amiri et al. teaches that local execution of the query always occurs if there is a chance that it will produce enough results); and

Provide query results (see Amiri et al. 6:35-37).

As to claim 15, Amiri et al. as modified teaches wherein the operation of providing query results comprises making the query results available to an application program (see Amiri et al. 6:35-37 and Dettinger et al. paragraph [0056]).

As to claim 16, Amiri et al. teaches wherein the operation of determining whether to execute the query on the subset of the data comprises determining whether a sufficient number of results will be generated by executing the query on the subset of the data (see Amiri et al. 6:38-65).

As to claim 17, Amiri et al. teaches wherein the operation of determining whether to execute the query on the subset of the data comprises estimating whether executing

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the query on the subset of the data would generate a desired number of results, the computer program product further comprising instructions operable to:

Receive a value representing the desired number of results (see Amiri et al. 6:38-65).

As to claim 18, Amiri et al. teaches wherein the computer program product further comprises instructions operable to:

In response to executing the query on an (N-1)th subset of the data, determine whether a sufficient number of results have been generated (see 6:59-65); and

If a sufficient number of results have been generated, defining an Nth subset of the data in the data repository and executing the query on the Nth subset of data (see Dettinger et al. paragraph [0105]. Any future queries, including the current one, can be executed on this Nth subset of data), otherwise executing the query on the data repository.

#### ***Allowable Subject Matter***

5. Claim 6 and 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles D. Adams whose telephone number is (571) 272-3938. The examiner can normally be reached on 8:30 AM - 5:00 PM, M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Charles Adams  
AU2164

  
**SAM RIMELL**  
PRIMARY EXAMINER